

# Notice of Allowability

Application No.

10/716,726

Examiner

George Suchfield

Applicant(s)

REDDY ET AL.

Art Unit

3672

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/14/04 Communication.
2. ☒ The allowed claim(s) is/are 1-58.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 06292004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

George Suchfield  
Primary Examiner  
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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with C. Clark Dougherty on June 29, 2004, wherein it was indicated that applicant's amendment to claims 1, 20 and 40 still failed to clarify the deficiency of step (b) of each claim as to which resin is cured, i.e., the 35 USC 112(2) rejection of the previous Office action. Moreover, it was noted that the amendment to step (a), as well as step (b), which was submitted by applicant did not appear consistent with the specification and remaining claims. Instead, it was agreed that claims 1, 20 and 40 could be amended to overcome the rejection in a manner consistent with the specification, e.g., pages 20 and 21, as well as claims 39 and 58, as set forth below.

The application has been amended as follows:

In claim 1, line 9, the recitation "is cured by the delayed acid catalyst" has been amended to read -- cures -- ; in line 15, "resin" has been changed to -- resins --, and the recitation "catalyzed by heat or the delayed acid catalyst, or both" has been deleted.

In claim 20, line 9, the recitation "is cured by the delayed acid catalyst" has been amended to read -- cures -- ; in line 16, "resin" has been changed to -- resins --, and the recitation "catalyzed by heat or the delayed acid catalyst, or both" has been deleted.

In claim 49, lines 9 and 10, the recitation "is cured by the delayed acid catalyst" has been amended to read -- cures -- ; in line 16, "resin" has been changed to -- resins --, and the recitation "catalyzed by heat or the delayed acid catalyst, or both" has been deleted.

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2. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1- 58 is that none of the references cited, taken either singly or in combination, teach or disclose a method of consolidating a zone or formation while drilling, and subsequently forming a chemical casing, as set forth in the claimed combinations, including the representative step and/or limitation(s) in claim 1 of drilling the zone or formation with a drilling fluid which has "a pH in the range of from about 6 to about 10" and further includes a "polymeric cationic catalyst capable of accepting and donating protons", "a particulate curable solid thermoset resin and a delayed acid catalyst", followed by contacting a filter cake formed on the walls of the zone or formation from said drilling fluid with an additional treating fluid which further deposits "a water soluble or dispersible thermoset resin", and a crosslinkable "water soluble or dispersible polymer" onto the filter cake, thus curing the thermosetting resins into a hardened cross-linked chemical casing on the walls of the zone or formation. In this regard, the cited prior art, such as Ortloff (3,126,959), Sydansk et al (4,722,397), and Gaudy et al (3,935,910) appear to drill a wellbore and form a chemical casing along the wellbore wall with a single drilling/treatment fluid and/or fail to teach or disclose the recited reaction mechanism and/or interaction between the drilling fluid and subsequent treating fluid.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Suchfield whose telephone number is 703-308-2152. The examiner can normally be reached on M-F (6:30 - 3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
George Suchfield  
Primary Examiner  
Art Unit 3672

Gs  
June 29, 2004